

Locality	males	females	% males
Wabash R., Terre Haute, Ind.....	0	18	00
Belmont Harbor, Chicago, Ill.....	0	18	00
creek, Koster, Ill.....	0	7	00
Kankakee R., Momence, Ill.....	0	13	00
Illinois R., Hardin, Ill.....	10	50	16.6
Mississippi R., Hamburg, Ill.....	12	48	20
Mississippi R., Alton, Ill.....	1	6	14.3
Kaskaskia R., Baldwin, Ill.....	60	153	28.2
Kaskaskia R., Evensville, Ill.....	5	3	62.5
Beaucoup Cr., Murphysboro, Ill...	17	28	27.7
Big Muddy R., Murphysboro, Ill...	17	45	27.4
Big Muddy R., Aldridge, Ill.....	7	9	43.7
Loutre R., Big Spring, Mo.....	0	20	00
Meramec R., Mattese, Mo.....	13	46	22
Meramec R., Kirkwood, Mo.....	553	749	42.5
Meramec R., Morschels, Mo.....	3	16	15.8
Meramec R., Eureka, Mo.....	3	6	33.3
Meramec R., Hunters Ford, Mo...	12	3	80
Meramec R., Catawissa, Mo.....	6	9	40
Meramec R., Stanton, Mo.....	14	26	35
Bourbeuse R., Pin Oak Ford, Mo..	26	23	53
Bourbeuse R., Union, Mo.....	8	20	28.6
Whitewater R., Burfordville, Mo...	16	5	76.2
White R., Calico Rock, Ark.....	2	4	33.3
Alabama R., Selma, Ala.....	1	2	33.3
Total.....	786	1327	37.2

MARINE MOLLUSCA OF NEW YORK CITY

By MORRIS K. JACOBSON

It is now more than twenty years since a listing of marine mollusks of the New York City area was undertaken by Mr. Arthur Jacot (*Nautilus* 32: 90-94, 33: 111-115, 34: 59-60). For the past two or three years the present author has been going over much the same ground, concentrating on the Rockaway Peninsula, stations 4 and 5 in Mr. Jacot's article (ib. 32: 91). It might be of interest to see in what respects a more recent list differs from the older.

Before beginning, it is proposed to add to Mr. Jacot's five stations two more, namely, station 6 just east of the Marine Parkway Bridge on the Rockaway shore of Jamaica Bay, where the receding tide exposes some hundred feet of sand and mud and

rocks; and station 7 at 117 Street near the Yacht Club, where *Odostomia* are found in large numbers.

The present paper will consist of three parts. First it is proposed to list species found in 1939-42 that do not appear on the Jacot list; second those species that appear on both lists; and third, species that were found only by Mr. Jacot.

SPECIES FOUND RECENTLY AND NOT MENTIONED BY MR. JACOT.

Nucula proxima Say. One valve on dredged land at 6.

Noetia ponderosa Say. Mr. Jacot reported three valves from Long Beach, but I have found them in moderately large numbers at 4 and 5. Since they are generally conceded to be fossil, it is possible that recent erosion of undersea beds has made them more plentiful.

Cyprina islandica Linne. Two valves at 4. *Astarte undata* Gould. Seven valves at 4.

Venericardia tridentata Say?. Of this species, apparently far out of its given range, Mr. Richard A. McLean of the Academy of Natural Sciences of Philadelphia says in a letter to the author (Nov. 17, 1941): "The small *Venericardia* is very like *V. tridentata* Say, but does not seem to match exactly. We have similar specimens in our own collection from Delaware Bay. They look like yours and are marked *tridentata* with a question mark after it. Perhaps they are an undescribed species, but I would hesitate to describe them without a very thorough search of the literature."

Laevicardium mortoni Conrad. Single valves not uncommon at 4.

Donax fossor Say. Very common during the summer months of 1938 and 1939 at 4. Since then rare, completely lacking in 1942. Color variation in the shell interior is pronounced, from white to deep purple. There is also a color series tinged with yellow.

Saxicava arctica Linne. One valve at 6.

Barnea costata Linne. Several fragments at 4. This species is reported from New York by S. Smith, *Catalogue of the Mollusca of Staten Island* (Natural Science Association, Proc., Vol. I, p. 35 and p. 50) but Mr. Jacot says: "I do not know of their having been reported (since) from the vicinity of the city." (*Naut.* 32: 114). The present listing then reestablishes them as a New York species. The same statements apply to *Littorina irrorata*, *Natica*

pusilla, and *Nassarius vibex* (see below), but not to *Haminoca solitaria*, which I have found at Centerport, Long Island, but not nearer.

Circulus (Lydiaphnis) liratus Verrill. This is probably a new locality record for this species, which C. W. Johnson records only from Cape Hatteras.

Stylifer stimpsoni Verrill, two specimens at station 4. *Epitonium angulatum* Say, several at 4. *Epitonium humphreysii* Kiener, several at 4. *Turbonilla winkleyi* Bartsch, several at 4. *Natica pusilla* Say, three specimens at 4 (Cf *Barnea costata* above). *Crucibulum striatum* Say, four specimens at 4. *Hydrobia salsa* Pilsbry, several specimens at 6. *Onoba aculeus* Gould, several specimens at 6. *Littorina irrorata* Say, not rare at 4 (Cf *Barnea costata* above). *Seila adamsii* H. C. Lea, one specimen at 4. *Nassarius vibex* Say, four specimens at 4 (Cf *Barnea costata* above).

Buccinum undatum Linné. Jacot reports one with much surprise (*Naut.* 34: 60), but worn specimens, bearing marks of having been occupied by *Pagurus*, are not uncommon. Egg cases containing prenatal forms are occasionally found.

Colus stimpsoni Mörch. Eight specimens found at 4, all bearing marks of having served as a dwelling for *Pagurus*.

Busycon carica Gmelin. Not uncommon generally. Omission of this far from rare species from Mr. Jacot's list is surprising.

Manglia cerina Kurtz and stimpson. Two specimens at 4.

SPECIES APPEARING ON BOTH LISTS.

The names used by Mr. Jacot have been changed, where necessary, to conform to C. W. Johnson's *List of Marine Molluscs etc.* (Boston 1934.) I have also adopted Dr. Johnson's method of omitting parentheses around authors' names.

Arca campechiensis pexata Say. *Arca transversa* Say. *Ostrea virginica* Gmelin. *Pecten irradians* Lamarck.

Pecten grandis Solander. Mr. Jacot found 16 specimens containing the animal beside a number of valves after a great storm at 4 (*Naut.* 34: 60). I have never been so fortunate, though I have occasionally found worn valves.

Anomia simplex Orbigny. *Mytilus edulis* Linne. *Mytilus edulis pellucidus* Pennant. *Modiolus demissus plicatulus* Lamarck, common in Jamaica Bay. *Periploma leanum* Conrad, at Far Rockaway, on the bay shore.

Pandora gouldiana Dall. Mr. Jacot found only one valve at 1. It is however not at all uncommon at 4 and 5.

Astarte castanea Say. This was the only "species of note" Mr. Jacot found at 4.

Venericardia borealis Conrad, several specimens at 4. *Divaricella quadrisulcata* Orbigny; frequent at 4 and 5; specimens frequently look very fresh.

Rocheportia planulata Stimpson. Quite common in 1941 and 1942 clinging to red sea weeds and, apparently by preference, to bryozoa. The animal attaches itself by a clear, elastic, single threaded byssus which it extrudes from the center of the ventral margin.

Callocardia morrhuana 'Linsley' Gould; not rare at 4; live specimens occasionally found in winter months. *Venus mercenaria* Linne, not common at 4 and 5. *Venus mercenaria notata* Say, difficult to be sure of identification of worn valves. *Gemma gemma* Totten.

Petricola pholadiformis Lamarek. I have frequently found young of this species caught by the byssus of *Mytilus edulis*. These forms are usually much distorted and nearly deprived of their corrugations, but otherwise seem not to have suffered from their captivity. The peculiar color manifestation which Mr. Robert C. Alexander noted in specimens collected at Cape May, and felt "may be an artificial condition caused by an excess of some chemical in the sea or the land of the locality," (*Naut.* 54: 4), is also present in many immature forms here. This color was also noted by Dall on Pacific coast Petricolas in 1900 (*Naut.* 13: 9) where he described it as follows: ". . . variously mottled and tinted with purple or reddish brown and yellow." Dall decided this was a common condition of nepionic forms of *Petricola tellimyalis* Carpenter (ib. 13: 11).

Tellina tenera Say; especially fine and large specimens were plentiful in 1941 and 1942 at 4. *Tellina tenella* Verrill, occasionally at 4. *Tagelus gibbus* Spengler. *Siliqua costata* Say, fragments at 4. *Spissula solidissima* Dillwyn. *Spissula solidissima similis* Say, more common at 5. *Mulinia lateralis* Linne, also at 6. *Mya arenaria* Linne, most common at 7. *Corbula contracta* Say, also at 4.

Barnea truncata Say. Most common at 5. Live specimens occasionally found at 4 in water logged wood.

Zirfaea crispata Linne. Somewhat less common than the preceding. In smaller wood fragments, *Barnea* and *Zirfaea* are never found together.

Teredo navalis Linne, common in driftwood at 4.

Epitonium multistriatum Say, Five small specimens at 4. *Pyramidella fusca* C. B. Adams, several specimens at 6. *Odostomia impressa* Say, one specimen at 6. *Odostomia trifida* Totten, common at 7. *Odostomia bisuturalis* Say, a few specimens at 6. *Polinices duplicata* Say. *Polinices heros* Say. *Polinices triseriata* Say. *Crepidula fornicata* Linne. *Crepidula glauca convexa* Say. *Crepidula plana* Say. *Paludestrina minuta* Totten, not uncommon at 4 and 6. *Littorina littorea* Linne, also at 6 and 7. *Littorina saxatilis* Olivi, has become quite common in Jamaica Bay. *Littorina palliata* Say, occasionally small specimens at 4. *Lacuna vineta* Montagu, common in Summer of 1941 at 4. *Triphora perversa nigrocincta* C. B. Adams, not uncommon at 4. *Cerithiopsis greenii* C. B. Adams, not uncommon at 4. *Bittium alternatum* Say; common at 4, immature forms especially so. *Eupleura caudata* Say. *Urosalpinx cinerea* Say.

Mitrella lunata Say. Common in 1939 and 1940 on sea weeds, bryozoa etc. A very lively creature which can float *Physa*-like on the under surface of still water.

Anachis avara similis Ravenel, one specimen at 4. *Nassarius obsoleta* Say. *Nassarius trivittata* Say. *Busycon canaliculatum* Say. *Cylichna oryza* Totten, not uncommon at 4. *Acteon punctostriatus* C. B. Adams, three specimens at 4. *Acteocina canaliculata* Say, common at 4, when conditions are right. *Melampus lineatus* Say. *Alexia myosotis* Draparnaud, one specimen at 4.

SPECIES NOT FOUND OR NOT IDENTIFIED BY PRESENT AUTHOR
WHICH APPEAR ON MR. JACOT'S LIST.

Nucula proxima truncula Dall. *Yoldia* sp?

Lyonsia hyalina Conrad. Station 1, where this species was found by Mr. Jacot, has not been revisited as yet.

Aligena elevata Stimpson.

Cardium pinnulatum Conrad. It is surprising that one valve of this rare species was reported and no sign of the rather common *Laevicardium mortoni*.

Gemma purpurea H. C. Lea. *Tellina versicolor* Cozzens. *Macoma balthica* Linne. *Dentalium* sp. *Pyramidella winkleyi* Bartsch?

Turbonilla nivea Stimpson. More or less severely damaged turbonillas are quite common at 4, but their condition and the natural difficulty of this group make reliable identification exceedingly difficult. Possibly this and the following turbonillas are represented in this group.

Turbonilla aequalis Say. *Turbonilla vinea* Bartsch. *Turbonilla areolata* Verrill. *Crepidula glauca* Say. *Paludestrina laevis* DeKay. *Adeorbis supranitidus lirata* Verrill (= *Circulus liratus* Verrill??).

NOTES AND NEWS

AN INTERESTING CACHE.—The National Museum has just received a very interesting collection of Naiads collected by Dr. L. W. Stephenson and Mr. Marc O. Miller in the Brazos River, upstream from Black Bridge, 15.5 miles northeast of Cameron, Milam County, Texas. These fresh-water clams came from "one pot hole in a sandstone concretion. This pot hole was about 12 inches in diameter and 15 inches deep. The shells were in a mixture of loose sand and pebbles." They were probably washed in by the stream in flood time. Dr. Stephenson tells me that the pot hole was dry in the dry season. The collection embraces 7 species as follows: *Amblema perplicata* (Conrad), 15 specimens and 6 valves. *Megaloniaias gigantea* (Barnes), 2 valves. *Quadrula forsheyi* (Lea), 21 specimens and 6 valves. *Quadrula houstonensis* (Lea), 21 specimens and 4 valves. *Arcidens confragosus* (Say), 1 young specimen. *Proptera coloradoensis* (Lea), 1 young specimen. *Lampsilis fallaciosa* (Smith), 1 specimen.—PAUL BARTSCH.

NEW NAME IN COELOCENTRUM.—I am indebted to Drs. Clench and Baker for bringing to my attention the preoccupation of my *Coelocentrum* (*Ptychocentrum*) *bourgeoisae* (Nautilus, vol. 56, pp. 91-92, 1943) by Dr. Pilsbry's *Coelocentrum* (*Schizopyle*) *bourgeoisae* (Nautilus, vol. 53, p. 27, 1939). I therefore take pleasure in rechristening my species *Coelocentrum* (*Ptychocentrum*) *marianum*. —PAUL BARTSCH.